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FACTORS AFFECTING IRAN'S FUTURE

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*Project Manager: Helen Metz
Analyst: Josua Sinai*

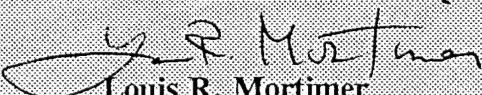
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Preface

This study examines the factors affecting Iran's future by assessing the impact of demographic, economic, and military trends in shaping the country's national security objectives over the next decade. The study also examines the implications of the imposition of an economic embargo on Iran as well as the impact of Iran's military buildup on the Persian Gulf region, particularly in countries where the United States maintains security alliances.

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Factors Affecting Iran's Future

By Joshua Sinai

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I. Introduction

This study examines the factors affecting Iran's future by focusing on the demographic, economic, and military trends in Iran and their impact on the country's national security objectives over the next decade. The paper also assesses the implications of an economic embargo on Iran and potential Iranian military threats to regional and United States national interests.

II. Demographic Trends

This section examines the population of Iran, particularly its size and density, internal distribution, and vital statistics such as births and deaths. Second, internal migration, immigration (especially the inflow of refugees), and emigration trends are assessed to evaluate the country's potential for social and political instability. The issue of "population explosion," particularly the impact of population growth on both economic development and living standards, is discussed in Section III, "Factors Affecting Economic Growth and Development."

Projections of Iran's population vary. The country's population was estimated at 56,232,000 in 1990, 58,337,000 in 1991, and approximately 60 million in 1992.¹ Based on current growth rates, by 2022 Iran's population is projected to reach 140 million.²

Iran has a high rate of population growth compared with the average worldwide rate of 2.2 percent. The World Bank estimated Iran's annual population growth rate at 3.4 percent in mid-1991

and has unofficially estimated a rate of 2.75 percent to 3.2 percent in 1992-93, adding approximately 1.65 million persons each year to the overall population.³ The Iranian government, however, claims the population growth rate was 2.5 percent in 1992-93.⁴

According to United Nations estimates, the birth rate (per 1,000) declined from 43.1 in 1975-80 to 35.0 in 1985-90. The death rate (per 1,000) dropped from 11.9 to 7.7 in the same period.⁵

Iran's land area is very large in relation to its population. However, its adverse physiography, particularly the extensive interior deserts, has concentrated much of the population in the fertile northern areas of the country.⁶ As a result, approximately 57 percent of the population reside in urban areas, according to the preliminary 1991 census results.⁷ The extensive migration of large segments of the population from rural to urban areas, together with Iran's high rate of population growth, has strained public utilities in many cities and has placed heavy burdens on domestically produced food supplies.

The population of Iran's major cities increased at a rapid rate in the 1980s and early 1990s. According to the 1991 census, the population of metropolitan Tehran, the country's largest city, was estimated at 10.4 million.⁸ In early 1993, Tehran's metropolitan population was estimated at 10 to 13 million, with the annual rate of population growth reaching 4 percent.⁹ Other

major cities include Mashhad, Esfahan, Tabriz, and Shiraz.

Iran has a heterogeneous population, with numerous minority ethnic groups. Although the main subgroup, comprising about 70 percent of the population, speaks Indo-Iranian languages, it is not homogeneous.¹⁰ The primary minority ethnic groups include Kurds (an estimated 6 million, or 11 percent¹¹), Turki, Azarbajianis, and Baluchis.

Iran also accommodates a large number of refugees. In October 1986, it was estimated that the country harbored between 300,000 and 500,000 Iraqi (mostly Shi'ite) refugees. Large numbers of Kurds from Iraq have also fled to Iran, with an estimated 150,000 remaining in the early 1990s.¹² The number of Iraqi Shi'ite refugees in Iran will probably increase as a result of repressive measures employed by the Iraqi government following the outbreak of civil war in southern Iraq.

Between 2.3 and 3.0 million Afghans entered Iran after the Soviet Union invaded Afghanistan in 1979.¹³ Many of the Afghan refugees live in special refugee camps in eastern Iran, with an estimated one-third settling, often illegally, without work permits, in Tehran, Mashhad, and Shiraz.¹⁴ The Iranian government has been pushing for the speedy repatriation of these refugees to Afghanistan, and there are reports of enforced repatriation of some of these refugees. This repatriation began in December 1992 with some 1,500 Afghans per week being repatriated.¹⁵

A final factor affecting demographic trends is the continual

emigration of educated Iranians since the 1979 Revolution. The number of emigrants has been estimated at 750,000 to 1.5 million.¹⁶ Most Iranian emigrants have settled in Western Europe and the United States (some 200,000 in 1987), with as few as 30,000 and as many as 600,000 living in Turkey.¹⁷ These emigrants include highly educated professionals, members of the prerevolutionary elite, religious or ethnic minorities (such as Bahais and Jews), political opponents, and some military deserters.¹⁸ With Iran continuing to reconstruct society along traditional Islamic lines, a future increase in emigration among these groups is likely.

III. Factors Affecting Economic Growth and Development

This section assesses Iran's prospects for economic growth and development by examining the changes in the country's gross national product (GNP). This has implications for living standards and for such policy objectives as a military buildup and increased public welfare services. A number of issues are involved in economic growth and development, such as political stability, factors of production (the emergence of an entrepreneurial class, government planning, investment in infrastructure, and a skilled labor force); an increase in exports to pay for imports; limiting population growth to manageable levels; and greater productivity accompanied by technological development. These factors cumulatively serve to increase per capita income, and lead to the growth of industry and services.

Iran's official policy goals as outlined in its five-year development plans are to attain a high rate of economic growth and self-sufficiency in all fields. These objectives are based on such factors as an increase in oil revenues, the availability of foreign credits, and the expansion of the private sector, with the latter two constituting problem areas. However, these objectives conflict with Iran's military buildup and expansionist foreign policy, both of which are detrimental to economic growth and political stability and may result in the imposition of an economic embargo by the international community, thus further weakening and isolating the country.

A. Factors Promoting Growth

Iran is considered to be facing severe economic problems, but there are a number of bright spots in the economy highlighted by the petroleum sector. Other promising areas include the intention of the government in the 1989-94 Five-Year Development Plan to rebuild the economy by increasing the economic growth rate to 8 percent, creating 2 million new jobs, and reducing the inflation rate to below 10 percent.¹⁹ Other features of the plan call for various reform measures, including encouraging the private sector to play a larger role in economic development, in reviving the economy, privatizing state enterprises to make them more efficient, reopening the Tehran stock exchange, creating free-trade zones, liberalizing regulations governing foreign exchange, and increasing non-oil exports, such as carpets, pistachios, caviar, and other items.²⁰

1. Petroleum Sector

The petroleum industry represents the major economic activity as well as the strongest area in the Iranian economy. Most of Iran's export revenue is generated from the export of crude petroleum and other petroleum products, and the country is heavily dependent on petroleum as its major source of foreign exchange. Although considered somewhat exaggerated, the budgeted government revenues for the petroleum sector are projected for the fiscal year 1993-94 at US\$17 billion.²¹ The petroleum and petrochemical industries are also among the few growth areas in the economy. For example, oil production rose from 2.5 million barrels per day (bpd) in 1988 to 3.44 million bpd in 1992, and it is projected to reach 4.5 million bpd by the mid-1990s.²²

2. Natural Gas

Iran has the world's second largest proven reserves of natural gas, accounting for 12.6 percent of total global reserves, making this sector the second biggest exporter after oil.²³ The government is currently seeking financial support to develop several new fields but is encountering some difficulty in obtaining major investments in these projects.

B. Factors Limiting Growth

Although Iran's level of economic performance has remained relatively strong, a number of factors present problem areas for the economy.

1. Reconstruction of War-Torn Economy

Since the 1988 ceasefire ending the eight-year Iran-Iraq

War, Iran has faced the challenge of postwar reconstruction. An estimated 10,000 Iranian towns were damaged during the war and major oil installations also suffered.²⁴ An enormous infusion of foreign and domestic investment is required to rebuild the country's infrastructure, such as repairing industrial power plants, roads, and improving agriculture. The cost of repairing the country's industrial plant alone is estimated at \$40 billion, with the total cost of reconstruction projected to exceed \$100 billion.²⁵ However, whereas short-term foreign investment is available, concern about the country's political stability as well as its anti-Western foreign policy has discouraged investors from financing long-term projects, thus making hard currency difficult to obtain. Finally, resorting to large-scale foreign financing would expose the government to charges by the militant Islamic clergy and other radical elements that it was compromising the country's "revolutionary ideology and independence."²⁶

2. Population Explosion

Iran's expanding population is viewed as a major constraint on economic development. The impact of the high rate of population growth on the economy is exacerbated by the country's high rate of unemployment and underemployment, the extensive migration from rural to urban areas, the displacement of large numbers of people by the Iran-Iraq War and the presence of more than 3 million refugees from Afghanistan and Iraq (for whom the government spends \$50 to \$100 million annually).²⁷ These factors

strain public utilities in urban centers, place a heavy burden on domestically produced food supplies (which can meet only 50 percent of the country's needs), and require the economy to grow by 4 percent annually just to meet present needs.²⁸

3. Inflation

Iranian Government figures claim an inflation rate for 1993 of 12 percent. Unofficial estimates, however, give an inflation rate of 30 to 35 percent. Certain key commodities and services, particularly in the housing sector, have a rate as high as 50 percent, and urban areas experience inflation rates exceeding 100 percent.²⁹

4. Foreign Credits

A major constraint on economic growth is Iran's high dependence on extensive foreign borrowing. Foreign borrowing reached \$6 billion in 1991-92, with the country accumulating an estimated \$30 billion in short-term external debt, a rate that is considered to be excessive and economically unsound, particularly because it is used to sustain the country's military buildup.³⁰ The international financial community now considers Iran to be a problem debtor country, replacing its previous reputation as a good credit risk.

Iran continues to borrow heavily overseas, although Iranian planners recognize that balancing the budget requires a reduction in the country's high foreign indebtedness, including a reduction in imports. The chairman of the Majlis (parliament) Plan and Budget Committee, Qorbanali Dorri Najafabadi, has acknowledged

that to reduce its foreign debt Iran must reduce its borrowing by 15 percent (\$4 to \$5 billion) in 1993-94; this accords with the government's proposed budget for that fiscal year.³¹

Nevertheless, in March 1993 Iran obtained three loans from the World Bank, totaling \$160 million for an electrical plant, \$157 million in credits to improve irrigation, and a \$141 million loan for health and family planning.³² Tehran also is negotiating with Japan for up to \$1.25 billion in official development assistance (ODA) loans. This sum has been delayed as a result of pressure from the United States, which objects to the funds being allocated for Iran's massive military buildup.³³

A second problem area is Iran's total payment arrears, which concerns supplier nations. For example, between the Spring of 1992 and January 1993, arrears were estimated at \$1.5 billion, with payment delays ranging from several weeks to five months.³⁴

5. Trade Deficit

The trade deficit for 1992-93 was estimated at \$9.9 billion, with total foreign debt reaching \$30 billion.³⁵ To reverse the trade deficit, the government has attempted to limit imports, particularly consumer items, from \$28 billion in 1992-93 to \$21 billion in 1993-94.³⁶ As a result, the Iranian trade deficit is projected to drop to \$2.6 billion for 1993-94.³⁷

6. Public Sector

Under President Ali Akbar Rafsanjani, Iran has spent an estimated \$10 billion on state-run heavy industry, such as large steel mills and automobile assembly plants, which experts regard

as inappropriate.³⁸ Large sums have also been expended on power generating facilities, while maintaining unprofitably low electricity rates.

C. Projected Rate of Growth, Including GDP, Through 1999

The government's First Five-Year Plan (1989-94) called for expenditures of \$394 billion, with \$27 billion obtained from foreign borrowing. The Second Five-Year Plan (1994-99) calls for consolidating existing projects, with no large-scale development envisioned, while concentrating on job creation and economic self-sufficiency.³⁹ The second plan also makes several assumptions, such as a major role for the private sector and a large infusion of foreign investment and foreign expertise to develop the economy. Such assumptions are considered unrealistic in view of the government's radical and anti-Western foreign policy objectives.

Although in 1990, 1991, and 1992 the economy grew at a relatively strong rate (11.7 percent, 10.1 percent, and 9.0 percent, respectively), the government projected a drop to 8 percent real growth in the gross domestic product (GDP) for 1993-94, while other observers forecast an additional drop to 4 percent in 1993.⁴⁰ This decline in real GDP growth is attributed to the limited number of growth areas in the economy, a high inflation rate, increasing difficulty in gaining foreign exchange and credits, and a decline in foreign trade expressed by an estimated 25 percent drop in imports.⁴¹

To balance its budget and attain economic growth, Iran must

therefore reduce its inflation rate, minimize foreign obligations, devalue its currency, eliminate deficit financing, and curtail price subsidies for essential goods.⁴² As the government is aware, dependence on the export of oil as the major source of foreign exchange must be decreased by increasing non-oil exports, such as industrial goods and fruits (that is, their current level of US\$2.5 billion annually during the period 1992-94 must be raised).⁴³ Finally, the requirements for economic growth must not be impeded by the government's promotion of revolutionary Islamic policies.

IV. Impact of Iran's Economy on the Persian Gulf Region

Iran exerts little economic influence on the Persian Gulf region, although the government is officially committed to improving diplomatic relations with its gulf neighbors, which would result in greater economic ties. Iranian Minister of Foreign Affairs Ali Akbar Velayati recently stated that "some moves" are under way to improve relations with Iraq and that greater "confidence building" is required to improve relations with Saudi Arabia and the other gulf states.⁴⁴ Until this stage is achieved, the gulf states are expected to play a minor role as the destination of Iran's exports or the source of its imports.

Iran plays a significant role in the Organization of Petroleum Exporting Countries (OPEC), where it continually presses for limiting oil output by member states in order to increase the price of oil.

V. Impact of an Economic Embargo on Iran

One way to change the government's radical and expansionist behavior is by instituting an economic embargo of Iran. This would not represent a new development. Restrictions on exports to Iran of a wide range of items that might be used for military purposes, particularly advanced and unconventional weaponry, have been imposed since November 1979. The United States first imposed an economic embargo on Iran in November 1979, following the taking of American hostages by Tehran's revolutionary Islamic government. This took the form of President Jimmy Carter's 1979 declaration of a national emergency with respect to Iran, which has since been renewed every year. However, as part of the settlement of the hostage crisis, some of the sanctions included in the United States embargo against Iran were formally lifted on January 19, 1981, and covert United States-Iran arms dealings took place in 1985-86 as part of the "Iran-Contra Affair." Nevertheless, with the outbreak of the Iran-Iraq War and the involvement of Iran in the seizure of American hostages in Lebanon, as well as other acts of state-sponsored terrorism against the United States, many of the earlier sanctions were subsequently reimposed or modified. The most recent sanction against Iran was represented by the Iran-Iraq Non-Proliferation Act of 1992, signed by President George Bush, which imposes restrictions on Iran that are similar to the current embargo on Iraq. The 1992 act calls for the automatic rejection of the sale of goods and technology to Iran that had previously required export licenses.⁴⁵ Prior to the act,

legislation had already been enacted to prohibit American investment in Iran.

Like the United States, Britain and Japan implemented sanctions against Iran. British restrictions are contained in the Non-Proliferation Controls Order of October 1992, and London announced on March 1, 1993, that it was expanding controls on arms exports and dual-use technology intended for Iran. Acceding to United States pressure, Japan banned shipments to Iran effective January 20, 1993, of some 200 items, including machine tools, lasers, superconductors, sensors, turbine engines and underwater cameras.⁴⁶ Bilateral ties between Japan and Iran, however, are unaffected by these restrictions. Japan continues to be Iran's second largest supplier of goods and a major purchaser of Iranian oil.⁴⁷

Nevertheless, a comprehensive economic embargo on Iran has yet to be imposed by the international community, as represented by the United Nations. Should such sanctions be imposed against Iran, their impact would depend on several factors.

First, such an embargo would have to be enforced not only by supplier and trading countries but also by neighboring states with which Iran maintains trade relations, where tight control would have to be maintained over border traffic with Iran. In addition, a naval blockade along the Iranian coastline would be needed to enforce such an embargo.

Second, recent examples of economic embargoes have demonstrated that while people, particularly the middle class and

the poor, are likely to suffer economic hardship as a result of a trade stoppage, the political elite would generally be unaffected by sanctions aimed at changing their behavior. With Iran increasingly turning to imported foodstuffs, prices for basic staples would be expected to increase sharply for the general population, but the elite would not suffer the same hardship. However, local manufacturing and assembly plants, either geared for internal consumption or geared for export, would presumably experience a drop in production.

Third, while such an embargo might have negative economic repercussions on Iran, their impact on the country's politics is likely to be "tenuous," particularly in causing government leaders to abandon their radical policies.⁴⁸ In fact, policy changes in Tehran may not flow in the desired direction. The government, in fact, is likely to stir up xenophobic nationalism, blaming the economic hardships on the Western-inspired sanctions rather than on the policies of Tehran's leaders. Government and religious leaders would also be likely to mobilize extremist religious and other radical groups throughout the Middle East and Europe to carry out an extensive terrorist campaign against the United States and its allies.⁴⁹ Finally, while economic hardships might cause some civil unrest by stirring up nationalistic sentiments, the regime would be likely to remain in power.⁵⁰

Fourth, the government would be expected to institute a number of mechanisms to evade such sanctions. Iran has already

begun the process of establishing indigenous defense and aviation industries to gain greater independence from potential international trade embargoes. Furthermore, it already violates international trade sanctions against Iraq by having large convoys of tanker-trucks that carry shipments of Iraqi oil products to Iran--despite the enormous number of military and civilian casualties it suffered in the eight-year Iran-Iraq War.⁵¹ Thus, Iraq and other neighboring countries, particularly those with land routes to Iran such as in the Transcaucasus, Central Asia, and Afghanistan, or those with air routes, such as Pakistan, are likely to cooperate with Iran in thwarting any Western-led international embargo against Tehran.

VI. Factors Affecting Military Growth

An ambitious buildup of the armed forces has been under way for the last several years to transform Iran into the dominant military power in the Persian Gulf. This has gone on despite claims by Iranian officials that the country is demilitarizing its economy and shifting funds from the armed forces to broader social requirements.⁵² The military buildup is expressed by an extensive arms procurement program and expansion of internal military production capabilities.

A. Defense Budget and Acquisition Trends

The First Five-Year Plan (1989-94) allocated \$10 billion for military procurement.⁵³ Iran has a number of security concerns as it seeks to rearm. First, much of its weaponry was expended in the Iran-Iraq War. Second, the Iranian government believes

that one of the reasons for its defeat in the Iran-Iraq War was its lack of missile delivery systems and nuclear, chemical, and biological weapons, and that these strategic weapons are required for any future conflict. Third, Iran is concerned about renewed threats from an invigorated Iraq as President Saddam Husayn consolidates his hold on power. Despite these Iranian concerns about security, its Arab neighbors and Western governments now believe that the military matériel ordered by Iran is designed to provide it with an offensive capability to dominate the Persian Gulf region in the near future and beyond.

Iran's procurement program is based on modernizing the armed forces in all spheres. Most important, this involves the acquisition of strategic weapons, including unconventional (nuclear, biological, and chemical) weapons and long-range strike systems (ballistic missiles, bombers, and strike aircraft), as well as sea defense systems, such as submarines. For its air defense force, Iran is intent on creating a modern and efficient command, control, and communications (C³) national network.⁵⁴ The air force is the largest beneficiary in the budget for military reconstruction.

The procurement program is primarily directed at non-Western suppliers, because Europe and the United States refuse to sell military equipment to Iran. From the former Soviet bloc, particularly Russia, Iran has purchased major armaments, such as long-range fighter aircraft and submarines. These have included three Russian-built Kilo-class patrol submarines (with the first

received in 1992). The total cost of the Kilo submarines (Project 877 in the Russian designation) is estimated at \$1.35 to \$1.8 billion (including the cost of crew training).⁵⁵ Considered the most capable Russian patrol submarine (SSK), it is capable of deploying surface-to-air missiles such as the SA-14 Gremlin or SA-16 Gimlet, and is armed with eighteen type 53 533mm dual-purpose torpedoes.⁵⁶ In preparation for operating these submarines, the Bandar Abbas and Chah Bahar naval bases have been expanded and modernized.⁵⁷ Finally, although these submarines are not useful in the shallow waters of the Persian Gulf, their threat lies in their deployment in the deep waters of the Arabian Sea, where they could be used to close the Strait of Hormuz during an offensive operation.⁵⁸

Iran has reportedly concluded a \$7 billion, five-year contract with Russia for large quantities of military equipment.⁵⁹ Matériel includes over 200 aircraft, such as MiG-27 and MiG-29 (and a MiG-29 assembly plant), MiG-31, Sukhoi Su-22, Su-24, Su-25, and Su-27 fighter aircraft, 12 Tupolev-22M Backfire aircraft bombers, A-50 AEW aircraft, as well as spare parts; SA-5/6/11/13 surface-to-air missiles (SAMs); T-72 tanks (including a T-72 assembly plant), armored personnel carriers, and artillery.⁶⁰ Russia has also provided assistance in maintaining some 115 fighter aircraft flown to Iran by Iraqi pilots during the Persian Gulf War by supplying replacement parts, ammunition, trainers, and technicians.⁶¹

In a contract valued at over US\$1.5 billion, Iran has

contracted with China for rocket launchers, F-7 fighter aircraft, K-8 training aircraft (including a K-8 assembly plant), short- and medium-range missiles (such as SA-2 [HQ-2J] SAMs), T-69 tanks, several 70-ton missile boats, and a Hegu-class missile patrol boat.⁶²

From North Korea, Iran is purchasing medium-range Scud-C ballistic missiles, including a Scud-C assembly line.⁶³ Iran will also be acquiring No Dong surface-to-surface ballistic missiles, with a 600-mile range, from North Korea.⁶⁴

Other foreign suppliers to Iran include Czechoslovakia (T-72 and T-55 tanks), Poland (T-72s and T-55s), and Romania (T-55, and armored personnel carriers). India, Yugoslavia, and Hungary are assisting in upgrading and maintaining Iran's armored forces.⁶⁵

In a parallel development, the command structure of the armed forces has been rationalized and modernized. A single chain of command has been established to oversee the armed forces and the Pasdaran Revolutionary Guards.

B. Internal Military Production Capabilities

The second component in Iran's military buildup is the development of nuclear weapons by expanding the country's domestic military production capabilities. Iran already has its own uranium mines. Iran has approached a number of countries for nuclear technology and expertise, including Russia, China, North Korea, Pakistan, India, Germany, Brazil, and Argentina (the United States government reportedly succeeded in blocking the sale of Argentine equipment that could be used in converting

natural uranium to weapons-grade uranium).⁶⁶ Other European manufacturers have also been approached for nuclear matériel, including four British manufacturers of specialized industrial furnaces.⁶⁷

Iran has purchased two 440-megawatt nuclear power reactors from Russia and two 300-megawatt reactors from China (to be set up in southern Iran, ostensibly for peaceful purposes).⁶⁸ Nuclear scientists and technicians from the former Soviet Union are also being recruited. Two 450-megawatt nuclear reactors were recently purchased from Turkmenistan for \$6 billion.⁶⁹ Included in the deal was the necessary technical support, including low-enriched uranium fuel. Pakistan, which has the capability to build nuclear bombs is supplying additional nuclear expertise, and India is exporting relevant technologies to Iran.⁷⁰

Iran's nuclear program is still in the early stages of development, and it may be disorganized. Nevertheless, according to published reports, the Central Intelligence Agency estimates that Iran will be capable of developing a nuclear weapon by the year 2000.⁷¹

VII. Impact of Iran's Military Buildup on the Persian Gulf Region

Iran's primary strategic objective is to become the dominant military power in the Persian Gulf region. The second objective is to lead the world of radical Islam. The third aim focuses on Lebanon and Sudan, where it maintains a limited military presence. The fourth objective is to exert a strong influence over the former Soviet republics of the Transcaucasus and Central

Asia, where there are large Muslim populations. These four strategic objectives are occasionally counterbalanced by contradictory signals emanating from Tehran of new conciliatory gestures that are invariably followed by acts of political subversion or defiance against other states.⁷²

In pursuit of its first strategic objective, Iran has begun to project military power in the Persian Gulf region. This has been aided by Iraq's military defeat in the Persian Gulf War and the further weakening of its military as a result of international sanctions. In addition, there are no indigenous forces in the region to effectively challenge Iranian military capability, despite the massive rearmament of the gulf states by Western suppliers.

These factors have already induced Iran to begin flexing its muscle in the region. In 1992 Iran attempted to annex Abu Musa, the largest of three disputed islands in the Persian Gulf, which it had administered jointly with the United Arab Emirates (UAE). In April 1992, several hundred UAE residents were expelled from Abu Musa, and Iran declared sovereignty over the three islands in September of that year. The islands are considered to be of strategic importance because they are located near the Strait of Hormuz, where oil tankers pass within ten miles. Also in 1992, Iran began a \$1.7 billion project to develop its side of an offshore oil and gas field, even though the field is predominantly under Qatari waters.⁷³ Another example of Iranian muscle flexing was the demand that Kuwait pay \$78 million in

"parking fees" for the Kuwaiti civilian aircraft flown to Iran by Iraqi pilots at the height of the Persian Gulf War.⁷⁴

These factors have forced Saudi Arabia and the other gulf states to become preoccupied by the "Iranian threat." To counter this threat they have embarked on three courses of action. First, they are engaging in a massive military build-up to make their armed forces the first line of defense against a potential Iranian incursion. However, their relatively weak military capabilities, will require a long build-up process. Second, the gulf states have formed closer defense relationships, characterized by increased training and other exercises with regional allies, through such organizations as the Gulf Cooperation Council (GCC).⁷⁵ Third, the gulf states have solidified their defense relationships with the United States, Britain, and France.

Iran is intent on flexing its military muscle in the Persian Gulf region, particularly in promoting the interests of Shi'ite populations in the gulf states. However, as part of its contradictory stance, following Iraq's military defeat in the 1991 Persian Gulf War, Iran did not intervene militarily to support the attempted secession of its coreligionists in southern Iraq.

Iran's second objective is to lead the world of Islam in a radical direction. Iran supports the activities of Islamic activists who challenge the political order in many Middle Eastern countries. Such organizations include Hamas, the

extremist Palestinian Islamic group in the West Bank and the Gaza Strip, and the Muslim Brotherhood in Egypt. These local movements, however, should not be regarded as clients controlled by Tehran.⁷⁶

Iran's third strategic objective focuses on Lebanon and Sudan, where it maintains a limited military presence. There are an estimated 1,500 Iranian Revolutionary Guards deployed in Lebanon (Iran has also recruited a number of Lebanese Shi'ites into this force).⁷⁷ In Sudan, some 2,000 Iranian Revolutionary Guards are currently assisting the central government's military campaign against Christian secessionists in the south.⁷⁸

Iran's fourth strategic objective extends to the Transcaucasus and Central Asian republics of the former Soviet Union. Even in this area, there are inconsistencies in Iran's foreign policy. For example, although there is an increased flow of economic and military goods between Iran and Russia and the two countries are in the process of negotiating a "strategic partnership" to stabilize Central Asia, Moscow has nevertheless become concerned about the increase in economic, political, and religious ties between Iran and the neighboring former Soviet republics.⁷⁹

VIII. Conclusion

Trends in Iranian demography, economy, and military activity indicate that the country's national security objectives will undergo little change over the next decade, as long as the current Islamist-dominated regime remains in power. Demographic

trends are exacerbating socioeconomic conditions in Iran and placing heavy burdens on the government's ability to implement social and economic development programs. The oil and gas sectors represent growth areas in the Iranian economy. But there are problem areas that are likely to result in a decline in the country's GDP, such as the enormous requirements involved in reconstructing the war-torn economy, a population explosion, inflation, a high dependence on foreign borrowing, a tightening availability of foreign credit, foreign payment arrears, a trade deficit, and inappropriate expenditures on heavy industry and a military buildup. Moreover, in the event of an imposition of an international economic embargo against Iran, its economy would be hurt in spite of Iran's ability to evade such sanctions. While Iran's rearmament program expresses legitimate security concerns, it is also designed to provide the country with an offensive military capability, including nuclear weapons, to dominate the Persian Gulf region militarily both in the near term and in the future. These developments are causing considerable concern among Iran's Arab neighbors. In the near term, Iran is likely to present the principal threat to United States interests in the Persian Gulf region, where three-fourths of the world's oil reserves are located.

IX. Tables

Table 1. Selected Economic Indicators, 1992

Real GDP growth (in percentages)	9.0
Exports (in billions of dollars)	18.10
Imports (in billions of dollars)	28.00
Inflation (in percentages)	12 ¹ /30-35 ²
External debt (in billions of dollars)	30.00
Oil production (in millions of barrels per day)	3.44
Exchange rate (average; Iranian rials to dollar)	65.50

¹ Official Iranian government rate² Unofficial estimates

Source: Based on information from Economist Intelligence Unit,
Country Report: Iran [London], No. 1, 1993, p. 3.

Table 2. Origins of Gross Domestic Product, 1990-91

	Percentage of Total
Hydrocarbons	19.4
Agriculture	17.8
Industry & mines	15.8
Services	47.0
GDP at factor cost	100.0

Source: Based on information from Economist Intelligence Unit,
Country Report: Iran [London], No. 1, 1993, p. 3.

Table 3. Main Destination of Exports, 1991

	Percentage of Total
Belgium-Luxembourg	6.5
France	7.5
Germany	4.7
Italy	9.4
Japan	15.9
Netherlands	6.7
South Korea	4.1
Spain	5.2

Source: Based on information from Economist Intelligence Unit,
Country Report: Iran [London], No. 1, 1993, p. 3.

Table 4. Main origins of imports, 1991

	Percentage of Total
Britain	4.6
France	4.5
Germany	20.6
Italy	8.9
Japan	12.6
Sweden	3.6
Turkey	2.7
United Arab Emirates	4.8

Source: Based on information from Economist Intelligence Unit,
Country Report: Iran [London], No. 1, 1993, p. 3.

X. Bibliography

Amid, Mohammad Javad. Agriculture, Poverty, and Reform in Iran. New York: Routledge, 1990.

Atkeson, Edward B. A Military Assessment of the Middle East, 1991-96. Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, December 7, 1992.

Auerbach, Stuart. "Are Sanctions More Harmful Than Helpful?" Washington Post, March 28, 1993, H1, H4.

Badeeb, Saeed M. "Iran's Dispute With UAE Over Three Gulf Island," Washington Report on Middle East Affairs, 11, No. 8, March 1993, 21, 90.

Boustany, Nora. "Iranian Faces New Challenges: Tough Problems for Rafsanjani," Washington Post, October 19, 1992, A1, A16.

Brooks, Geraldine. "Veiled Capitalists: The New Revolution in Iran Is Taking Place on an Economic Front," Wall Street Journal, September 16, 1991, A15.

Central Intelligence Agency. Government Structure of the Islamic Republic of Iran: A Reference Aid. Washington: Central Intelligence Agency, Directorate of Intelligence, December 1992.

Cordesman, Anthony H. After the Storm: The Changing Military Balance in the Middle East. Boulder, CO: Westview Press, 1993.

Economist Intelligence Unit. Country Report: Iran [London], No. 4, 1992.
_____. Country Report: Iran [London], No. 1, 1993.

Ehteshami, Anoushiravan. "The Armed Forces of the Islamic Republic of Iran," Jane's Intelligence Review [London], 5, No. 2, February 1993, 76-80.

Eisenstadt, Michael. "Déja-Vu All Over Again? Foreign Loans and Iran's Military Build-Up," Washington: Washington Institute for Near East Policy, April 1993.

"An Exodus of Russian Scientists," Foreign Report [London], January 28, 1993, 3.

Friedman, Norman. "World Navies in Review," U.S. Naval Institute Proceedings, 119, No. 3, March 1993, 94-123

Gill, R. Bates. Chinese Arms Transfers: Purposes, Patterns, and Prospects in the New World Order. Westport, CT: Praeger, 1992.

Gunter, Michael M. The Kurds of Iraq. New York: St. Martin's Press, 1992.

Haghayeghi, Mehrdad. "Politics and Ideology in the Islamic Republic of Iran," Middle Eastern Studies [London], 29, No. 1, January 1993, 36-52.

Hooglund, Eric. "The Society and Its Environment." Pages 71-136 in Iran: A Country Study (ed., Helen Chapin Metz.) Washington: GPO, 1989.

International Institute for Strategic Studies. The Military Balance, 1992-1993. London: Brassey's, 1992.

"Iran," Pages 409-59 in The Middle East and North Africa, 1993. London: Europa, 1993.

"Iran: External Debts Put at Record \$30,000 Million," Middle East Economic Digest [London], February 5, 1993, 16.

"Iran: Some Trade Partners Stop Export Cover," Middle East Economic Digest [London], January 29, 1993, 20.

"Iran Economy: The Politics of Finance," Middle East [London], July 1991, 12-14.

"Iran's Growing Ambitions," Foreign Report [London], No. 2237, December 17, 1992, 5.

"Israeli Press Details Iranian Weapons Program," Foreign Press Note, Foreign Broadcast Information Service, March 3, 1993.

"Japan and UK Tighten Rules on Strategic Sales," Middle East Economic Digest [London], February 5, 1993, 16.

"Japan Delays ODA Loan for Karun-4 Dam," Middle East Economic Digest [London], March 5, 1993, 21-22.

Jehl, Douglas. "Iran Said to Buy Oil from Baghdad," New York Times, March 29, 1993, A7.

Kaempfer, William H. and Anton D. Lowenberg. International Economic Sanctions: A Public Choice Perspective. Boulder, CO: Westview Press, 1992.

Katzman, Kenneth. "Iran: Current Developments and U.S. Policy," CRS Issue Brief. Washington: Library of Congress,

Congressional Research Service, February 11, 1993.

_____. The Warriors of Islam: Iran's Revolutionary Guard.
Boulder, CO: Westview Press, 1993.

Lawless, Richard I. "Economy," in "Iran," The Middle East and North Africa, 1992. London: Europa, 1992.

Lok, Joris Janssen. "Russia Delivers First 'Kilo' to Iran," Jane's Defence Weekly, [London], November 21, 1992, 9.

Milhollin, Gary. Exports and Terrorism: U.S. Export Licenses to Iran, September 1990 to September 1991. Washington: Wisconsin Project on Nuclear Arms Control, January 1992.

Murphy, Kim. "Social Reforms Out as Iran Takes Turn to the Right," Los Angeles Times, September 29, 1992, H3.

"Navy Confirms Order for Three Russian Subs," Middle East Economic Digest [London], December 11, 1992, 10.

"Nuclear Fears," International Defense Review [London], 2, 1993, 145- 46.

O'Sullivan, Edmund. "MEED Special Report: Defence," Middle East Economic Digest [London], November 6, 1992, 5-12.

Paloczi-Horvath, George. "Submarines: Danger Beneath the Waves," Defence [London], 24, No. 3, March 1993, 37.

Petrosian, Vahe. "Iran," Middle East Economic Digest [London], March 1, 1991, 7.

_____. "Iran: Some Trade Partners Stop Export Cover," Middle East Economic Digest [London], January 29, 1993, 20.

_____. "Iran Back in the Firing Line," Middle East Economic Digest [London], December 4, 1992, 2-3.

Pipes, Daniel, and Patrick Clawson. "Ambitious Iran: Troubled Neighbors," Foreign Affairs, [Special Annual Issue: America and the World 1992/93], 122-141.

"Russia Reaffirms Military Connection," Middle East Economic Digest, [London], November 20, 1992, 12.

Sick, Gary. "The Two Faces of Iran," Washington Post, April 4, 1993, C1-C2.

Smith, R. Jeffrey. "Iraq Shipped Oil to Iran, U.S. Alleges," Washington Post, March 28, 1993, A1, A28.

Starr, Barbara. "Three-Tier Plan Aims at Stronger Kuwait," Jane's Defence Weekly [London], February 20, 1993, 13.

"Sudan: Peace Talks Planned Amid Arms Build-Up," Middle East Economic Digest [London], 37, No. 12, March 26, 1993, 32.

"US Divided over Iranian Nuclear Threat," Middle East Economic Digest [London], December 11, 1992, 10.

van England, Claude. "Iran Defends Its Pursuit of Nuclear Technology," Christian Science Monitor, February 18, 1993, 7.

"Velayati Talks of Gulf 'moves,'" Middle East Economic Digest, [London], March 26, 1993, 23.

"Wary Partners in Central Asia," Middle East [London], No. 223, May 1993, 20.

Williams, Daniel. "'Outlaw' Iran Given World Bank Loan," Washington Post, March 31, 1993, A26.

XI. ENDNOTES

1. Richard I. Lawless, "Economy," in "Iran," The Middle East and North Africa, 1992, London, 1992, 450; and "Iran," The Middle East and North Africa, 1993, London, 1993, 444.
2. "Iran," The Middle East and North Africa, 1993, 426.
3. Economist Intelligence Unit, Country Report: Iran, No. 4, 1992, 13.
4. Ibid.
5. "Iran," The Middle East and North Africa, 1993, 444.
6. "Iran," The Middle East and North Africa, 1993, 426.
7. Ibid.
8. Ibid.
9. Op Cit., 450.
10. Eric Hooglund, "The Society and Its Environment," in Iran: A Country Study (ed., Helen Chapin Metz), Washington, 1989, 83.
11. Michael M. Gunter, The Kurds of Iraq, New York, 1992, 119.
12. "Iran," The Middle East and North Africa, 1993, 427.
13. "Iran," The Middle East and North Africa 1993, 410, 427; and Eric Hooglund, "The Society and Its Environment," 77.
14. Hooglund, "The Society and Its Environment," 82-83.
15. Economist Intelligence Unit, Country Report: Iran [London], No. 1, 1993, 14.
16. Eric Hooglund, "The Society and Its Environment," 81.
17. Ibid.
18. Ibid.
19. "Iran," The Middle East and North Africa, 1993, 443.
20. "Iran," The Middle East and North Africa, 1993, 428, 439.
21. Economist Intelligence Unit, Country Report: Iran [London], No. 1, 1993, 5-6.

22. Economist Intelligence Unit, Country Report: Iran [London], No. 1, 1993, 3; Daniel Pipes and Patrick Clawson, "Ambitious Iran, Troubled Neighbors," Foreign Affairs, [Special Annual Issue: America and the World, 1992/93], 125.
23. "Iran," The Middle East and North Africa, 1993, 435.
24. Geraldine Brooks, "Veiled Capitalists: The New Revolution in Iran Is Taking Place on an Economic Front," Wall Street Journal, September 16, 1991, A15.
25. "Iran," The Middle East and North Africa, 1993, 428.
26. Ibid.
27. Ibid., 427.
28. Vahe Petrossian, "Iran," Middle East Economic Digest [London], March 1, 1991, 7; Economist Intelligence Unit, Country Report: Iran [London], No. 4, 1992, 13.
29. Economist Intelligence Unit, Country Report: Iran [London], No. 1, 1993, 18.
30. Pipes and Clawson, "Ambitious Iran, Troubled Neighbors," 125; "Iran: External Debts Put at Record \$30,000 Million," Middle East Economic Digest [London], February 5, 1993, 16.
31. "Iran: External Debts Put at Record \$30,000 Million," 16.
32. Daniel Williams, "'Outlaw' Iran Given World Bank Loan," Washington Post, March 31, 1993, A26.
33. "Japan Delays ODA Loan for Karun-4 Dam," Middle East Economic Digest [London], March 5, 1993, 21-22.
34. "Iran: Some Trade Partners Stop Export Cover," Middle East Economic Digest [London], January 29, 1993, 20.
35. Economist Intelligence Unit, Country Report: Iran [London], No. 1, 1993, 6, 23.
36. Ibid., 6.
37. Ibid., 7.
38. Pipes and Clawson, "Ambitious Iran, Troubled Neighbors," 125.
39. Economist Intelligence Unit, Country Report: Iran [London], No. 1, 1993, 18.
40. Ibid., 5-6.

41. Ibid., 6.
42. "Iran: External debts put at record \$30,000 million," Middle East Economic Digest [London], February 5, 1992, 16.
43. "Iran," The Middle East and North Africa, 1993, 439; and Economist Intelligence Unit, Country Report: Iran [London], No. 1, 1993, 7.
44. "Velayati Talks of Gulf 'Moves,'" Middle East Economic Digest [London], March 26, 1993, 23.
45. "Japan and UK Tighten Rules on Strategic Sales," Middle East Economic Digest [London], February 5, 1993, 16.
46. Ibid.
47. "Japan Delays ODA Loan for Karun-4 Dam," Middle East Economic Digest [London], March 5, 1993, 21.
48. William H. Kaempfer and Anton D. Lowenberg, International Economic Sanctions: A Public Choice Perspective, Boulder, CO: 1992, 111-12.
49. Stuart Auerbach, "Are Sanctions More Harmful Than Helpful?" Washington Post, March 28, 1993, H4.
50. Ibid., H1.
51. Iran's acceptance of secret shipments of oil products from Iraq are reportedly part of an Iranian-Iraqi agreement to deliver Iranian oil to Sudan. See Gary Sick, "The Two Faces of Iran," Washington Post, April 4, 1993, C1.
52. Mohammad Hossein Adeli, governor of Iran's Central Bank, is quoted as saying that "Fortunately....we don't have any serious military threat. The threat we do have is economic. If you don't have enough food, even if you have the most sophisticated tank, how are you going to use it?" See Geraldine Brooks, "Veiled Capitalists: The New Revolution in Iran is Taking Place on an Economic Front," Wall Street Journal, September 16, 1991, A15.
53. Pipes and Clawson, "Ambitious Iran: Troubled Neighbors," 127.
54. Anoushiravan Ehteshami, "The Armed Forces of the Islamic Republic of Iran," Jane's Intelligence Review [London], February 1993, 77.
55. "Navy Confirms Order for Three Russian Subs," Middle East Economic Digest [London], December 11, 1992, 10.

56. George Paloczi-Horvath, "Submarines: Danger Beneath the Waves," Defence [London], 24, No. 3, March 1993, 37; and Joris Janssen Lok, "Russia Delivers First 'Kilo' to Iran," Jane's Defence Weekly [London] November 21, 1992, 9.

57. Anoushiravan Ehteshami, "The Armed Forces of the Islamic Republic of Iran," 77.

58. Ibid.

59. "Israeli Press Details Iranian Weapons Program," Foreign Press Note, 1.

60. "Israeli Press Details Iranian Weapons Program," Foreign Press Note, 1; and Michael Eisenstadt, "Déjà-Vu All Over Again? Foreign Loans and Iran's Military Build-Up," Washington, April 1993, 1.

61. Edward B. Atkeson, A Military Assessment of the Middle East, 1991-96, Carlisle Barracks, PA, December 7, 1992, 33.

62. "Israeli Press Details Iranian Weapons Program," 2; Eisenstadt, "Déjà-Vu All Over Again? Foreign Loans and Iran's Military Build-Up," 2.

63. Petrosian, "Iran Back in the Firing Line," Middle East Economic Digest [London], December 4, 1992, 3.

64. Eisenstadt, "Déjà-Vu All Over Again? Foreign Loans and Iran's Military Build-Up," 1; "Israeli Press Details Iranian Weapons Program," Foreign Press Note.

65. Eisenstadt, "Déjà-Vu All Over Again? Foreign Loans and Iran's Military Build-Up," 2.

66. Eisenstadt, "Déjà-Vu All Over Again? Foreign Loans and Iran's Military Build-Up," 1; and "Nuclear Fears," International Defense Review [London], 2, 1993, 145-46.

67. "Iran's Growing Ambitions," Foreign Report [London], No. 2237, December 17, 1992, 5.

68. Pipes and Clawson, "Ambitious Iran: Troubled Neighbors," 127.

69. "Israeli Press Details Iranian Weapons Program," Foreign Press Note, 2.

70. 2.

71. "US Divided over Iranian Nuclear Threat," Middle East Economic Digest [London], December 11, 1992, 10.

72. This point is proposed by Gary Sick in "The Two Faces of Iran," Washington Post, April 4, 1993, C1.

73. Pipes and Clawson, "Ambitious Iran: Troubled Neighbors," 126.

74. Ibid.

75. Barbara Starr, "Three-Tier Plan Aims at Stronger Kuwait," Jane's Defence Weekly [London], February 20, 1993, 13.

76. Gary Sick, "The Two Faces of Iran," C2.

77. International Institute for Strategic Studies, The Military Balance, 1992-1993, London, 1992, 115.

78. "Sudan: Peace Talks Planned Amid Arms Build Up," Middle East Economic Digest [London], 37, No. 12, March 26, 1993, 32.

79. "Wary Partners in Central Asia," Middle East [London], No. 223, May 1993, 20.